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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/733,925 | 12/12/2000 | Hiroyasu Yamamoto | 2000-1665A | 3789 |

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WENDEROTH, LIND & PONACK, L.L.P.
Suite 800
2033 K Street, N.W.
Washington, DC 20006

| EXAMINER | |
|---|---|
| ARANI, TAGHI T | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2131 | |

DATE MAILED: 12/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/733,925 | YAMAMOTO ET AL. | |
| | Examiner | Art Unit | |
| | Taghi T. Arani, Ph.D. | 2131 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on *12 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

Claims 1-11 are pending for Examination.

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2-3, 4 and 6-8** are rejected under 35 U.S.C. 102(b) as being anticipated by Weiss, U.S. Patent No. 5,485,519 issued January 1996 .

**As per claim 1**, Weiss teaches an encryption display card characterized by comprising:

a main body (9) of a thin plate [Fig. 2A, col. 7, lines 47-63];

mode switching means (2) for switching between two modes [Fig. 2A element S, see also col. 9, line 60, i.e. a special key operated as a mode switching means] including an encryption registration [col. 7, lines 50-52, i.e. circuit 42 (Fig. 2B) including encryption and decryption processes] mode and an encryption search mode;

label input means (7) for accepting an input of label data [Fig.1, 18A, i.e. character input device for inputting a PIN, col. 8, lines 24-26];

encryption generating means (22) for, upon input of the label data through said label input means in the encryption registration mode, generating a random encryption for a label equivalent to the label data [col. 8, lines l27-41, i.e. generating a private key or multibit token secret code];

encryption storage means (3) for storing the encryption generated by said encryption generating means in a one-to one correspondence with the label [ col. 9, lines 30-32, Fig. 2B element 46]; and

display means (6) for [ col. 7, lines 42-43], upon input of the label data through said label

input means in the encryption search mode, displaying the encryption corresponding to the label equivalent to the label data with reference to said encryption storage means [col. 9, lines 9, lines 53 through col. 10, line 6, i.e. reproducing the private key or multibit token secret code(i.e. an encryption) by inputting PIN (i.e. label data) and employing a special key (for search mode)].

**As per claim 2**, Weiss teaches an encryption display card characterized by comprising:

a main body (9) of a thin plate [Fig. 2A, col. 7, lines 47-63];

mode switching means (2) for switching between two modes [Fig. 2A element S, see also col. 9, line 60, i.e. a special key operated as a mode switching means] including an encryption registration [col. 7, lines 50-52, i.e. circuit 42 (Fig. 2B) including encryption and decryption processes] mode and an encryption search mode;

label input means (7) for accepting an input of label data [Fig.1, 18A, i.e. character input device for inputting a PIN, col. 8, lines 24-26];

digit number specifying means (7) for accepting a specific digit number of an encryption[ col. 8, lines 62-67];

encryption generating means (22) for, when the digit number of an encryption is specified through said digit number specifying means upon input of the label data through said label input means in the encryption registration mode, generating a random encryption of a specified digit number for a label equivalent to the label data; [ col. 8, lines l27-41, i.e. generating a private key or multibit token secret code, col. 8, lines 62-67, i.e. an encryption when the digit number is specified ];

encryption storage means (3) for storing the encryption generated by said encryption generating means in a one-to one correspondence with the label [ col. 9, lines 30-32, Fig. 2B

element 46]; and

display means (6) for [ col. 7, lines 42-43], upon input of the label data through said label input means in the encryption search mode, displaying the encryption corresponding to the label equivalent to the label data with reference to said encryption storage means [col. 9, lines 9, lines 53 through col. 10, line 6, i.e. reproducing the private key or multibit token secret code(i.e. an encryption) by inputting PIN (i.e. label data) and employing a special key (for search mode)].

**As per claims 3 and 6**, Weiss teaches the encryption display card according to claims 1 and 2 respectively, wherein said encryption storage means (3) is capable of storing more than one encryption [ col. 7, lines 22-31, i.e. situations where two tokens are required in order to gain access to processor ..... in order to encrypt or decrypt data for use with processor].

**As per claims 4 ,7 and 8**, Weiss teaches the encryption display card according to claims 1 and 2 respectively, wherein said encryption generating means (22)generates a random encryption by using a natural random number or a pseudo-random number [ col. 8, lines 29-41, i.e. ORing the PIN or secret code with selected bits of private key (i.e. pseudo-random number, see also col. 0, lines 19-29] .

## *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 5,9,10 and 11** rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss as applied to claims 1, 2,3 and 4 above and further in view of WO 97/20265 (Casio Computer Co., LTD.) , published June 5, 1997.

Weiss discloses a secret device code or codes (col. 13, lines 23-25i.e. password) to generate the private key (i.e. an encryption). Weiss uses PIN (i.e. personal identification) in every and all use of the encryption device but fails to teach the encryption display card according to claims 1, 2, and 4 respectively, further comprising:

password input means (7) for accepting an input of operation enable password data; and ....., upon input of the operation enable password data through said password input means, storing the operation enable password data in password storage means (3) as an operation enable password when said encryption display card is used for a first time, .....
authenticating means also for, when said encryption display card is used for a second time or beyond, enabling operations thereafter only if input operation enable password data coincides with the operation enable password stored in said password storage means.

However, WO 97/20265 of Casio computer discloses the above recited features in claims 5, 9, 10 and 11 [ see Page 8, line 9 through page 14, line 5, password registration process, see also Fig 6, S3-S13, see also element S3 (for F=1, i.e. when display device is used a first time, see also Fig. 6 element S21-S22, i.e. enabling operation thereafter only if input operation enable password data (i.e. collation key) coincides with the operation enabled (i.e. registered) password stored].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the operation enable password data taught by WO 97/20265 in Weiss's

smart card to assure that Weiss's smart card is being utilized by authorized users and further to provide a password easy for particular users to memorize but difficult for others to understand, page 2, lines 2-7 (WO 97/20265)].

Prior art made of record, not relied upon.

US 4,453074 is directed to a protection system for intelligent cards having password protected through encryption.

US 4, 614,861 discloses a unitary, self-contained card which does not require interaction with fixed terminal device to prevent monitoring of confidential information contained within the card.

US 4,697,072 is directed to an identification card and an authentication system.

US 5, 657,388 discloses a method and apparatus for utilizing a token which to provide secure access by authorized users to a selected resource by storing a secret user code in machine readable form.

US 5,180,902 teaches a self verifying transaction card having a self contained keyboard for entering personal information code and a simplified verification display.

US 5,928,364 is directed to a secret data storage device capable of setting password data which is easy for specific user to memorize but it is difficult for others to understand.

US 6,163,71 relates to a device for facilitating financial account transactions which includes a processing unit including a cryptographic processor.

US 6,567,915 is directed to an integrated circuit device for authenticating identities and authorizing transactions.

US 6,636,973 discusses secure and dynamic biometric-based token used in a computer network for access control and authentication.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (703)305-4274. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Taghi T. Arani, Ph.D.
Examiner
Art Unit 2131

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AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100